

APPENDIX D

THREAT HAND GRENADES

This appendix provides general information on common threat hand grenade identification, functions, and capabilities. North Korea, China, and many former Soviet Union nations have an extensive inventory of hand grenades. As with most equipment in use by these nations, older hand grenades remain in circulation and use long after being classified obsolete.

Section I. FORMER SOVIET UNION NATIONS

D-1. RGN OFFENSIVE HAND GRENADE

- Type: Offensive. (Figure D-1)
- Weight: 310 grams.
- Body Material: Aluminum.
- Filler Material: 114 grams A-1X-1 (RDX 96 percent, wax 4 percent) explosive.
- Fuze Type: Striker release, impact, or self-destruct.
- Fuze Delay: Impact, 1 to 2 seconds; time, 3.5 to 4 seconds (self-destruct).
- Range Thrown: 30 meters.
- Lethal Radius: 4 meters.

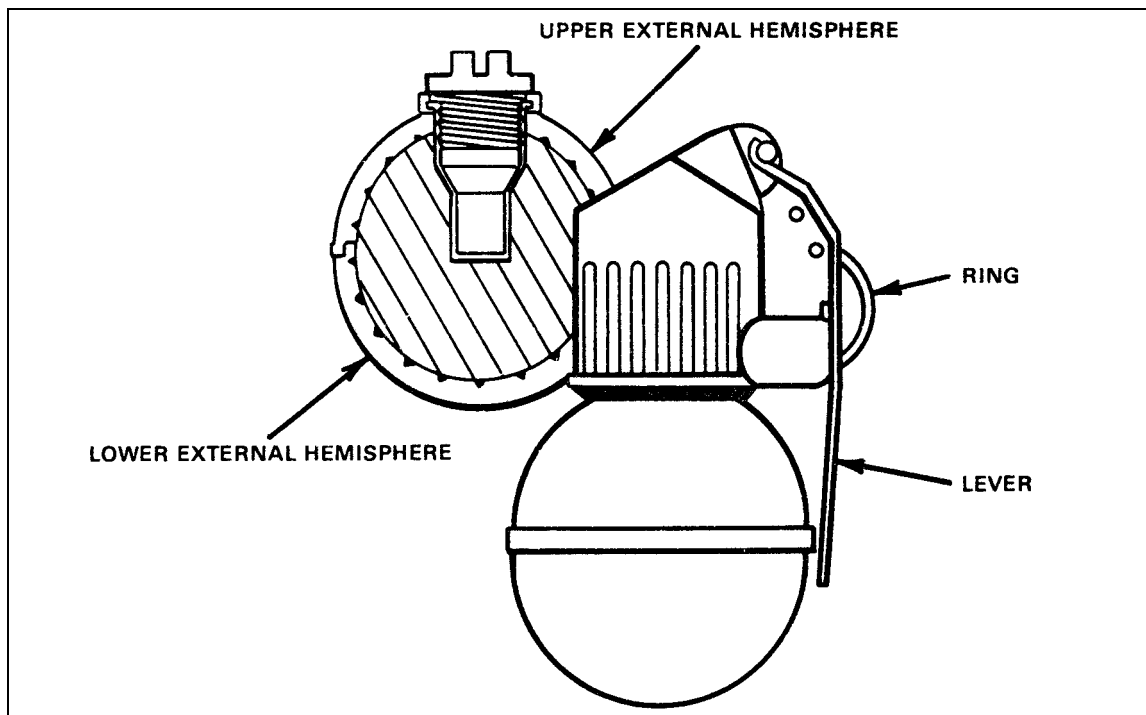


Figure D-1. RGN hand grenade.

D-2. RGO DEFENSIVE HAND GRENADE

- Type: Defensive. (Figure D-2)
- Weight: 530 grams.
- Body Material: Aluminum.
- Filler Material: 92 grams A-1X-1 (RDX 96 percent, wax 4 percent) explosive.
- Fuze Type: Striker release, impact, or self-destruct.
- Fuze Delay: Impact, 1 to 2 seconds; time, 3.5 to 4 seconds.
- Range Thrown: 30 to 40 meters.
- Lethal Radius: 6 meters.

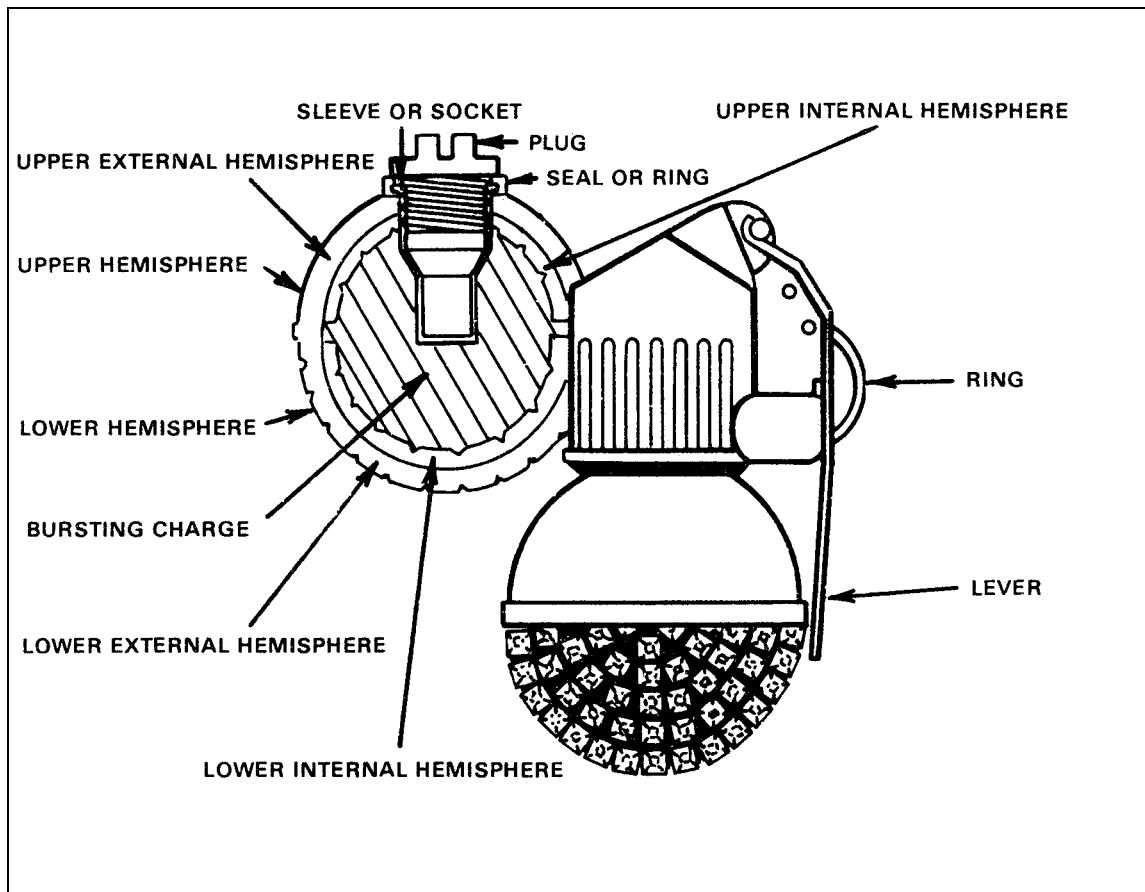


Figure D-2. RGO hand grenade.

D-3. F1 FRAGMENTATION HAND GRENADE

- Type: Fragmentation. (Figure D-3)
- Weight: 700 grams.
- Body Material: Cast iron.
- Filler Material: 60 grams TNT.
- Fuze Type: Striker release.
- Fuze Delay: 3 to 4 seconds; for booby traps, 0 to 13 seconds.
- Range Thrown: 30 meters.
- Lethal Radius: 20 to 30 meters.

NOTE: The F1 has been copied and produced by numerous other countries throughout the world.

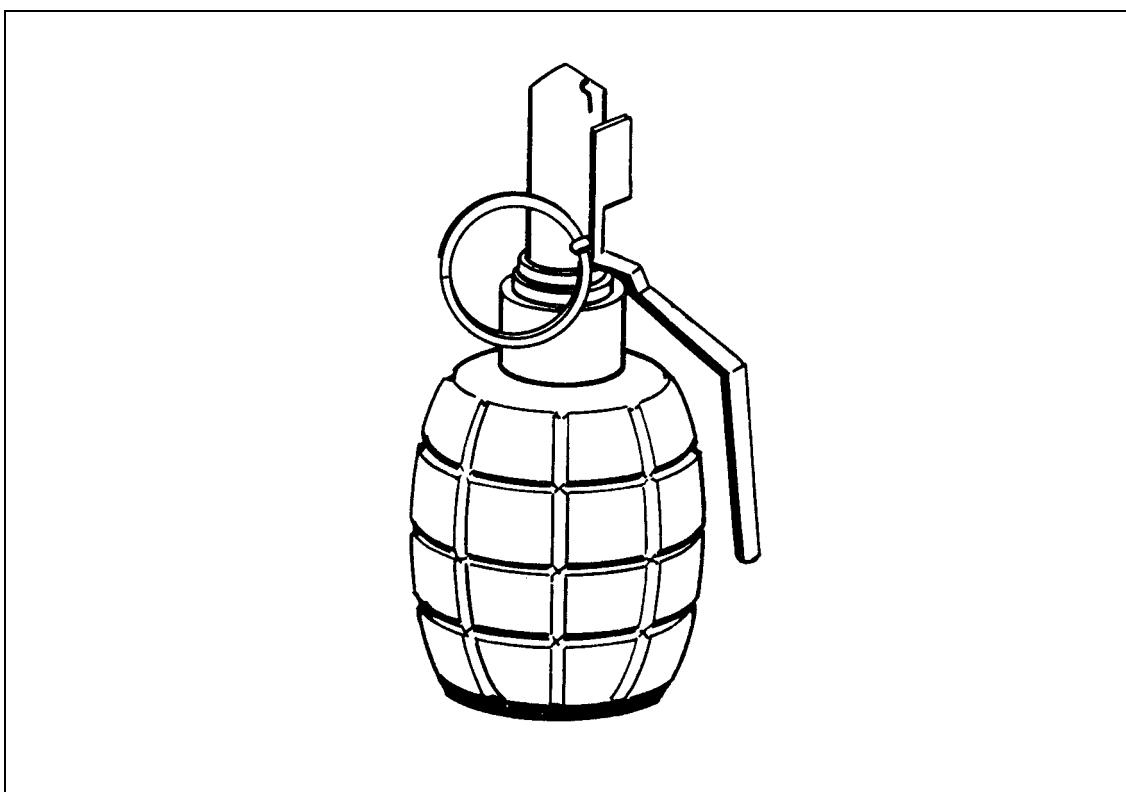


Figure D-3. F1 hand grenade.

D-4. RKG-3M ANTITANK HAND GRENADE

- Type: Antitank. (Figure D-4)
- Weight: With fuze, 1.07 kilograms.
- Weight of HE Filling: TNT/RDX, 540 grams.
- Penetration: 125 millimeters.
- Fuze Type: Instantaneous impact, base detonating.
- Effective Fragment Radius: 20 meters.
- Length: 350 millimeters.
- Diameter: 65 millimeters.

NOTE: The RKG-3 family of grenades has been copied and produced by numerous other countries throughout the world.

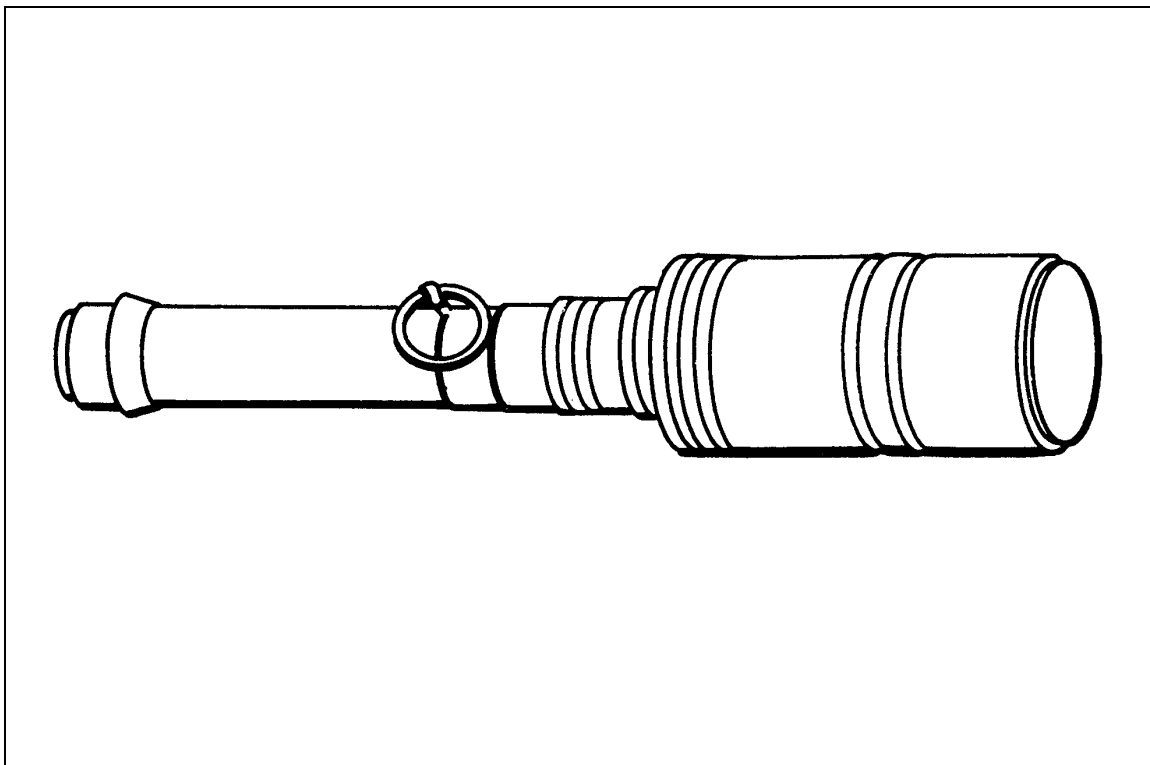


Figure D-4. RKG-3M antitank hand grenade.

D-5. RGD-5 FRAGMENTATION HAND GRENADE

- Type: Fragmentation. (Figure D-5)
- Weight: 310 grams.
- Filler Material: 110 grams of TNT.
- Fuze Delay: 3 to 4 seconds.
- Range Thrown: 40 meters.
- Effective Fragment Radius: 15 to 20 meters, maximum fragment range about 30 meters.

NOTE: The RGD-5 has been copied and produced by numerous other countries throughout the world.

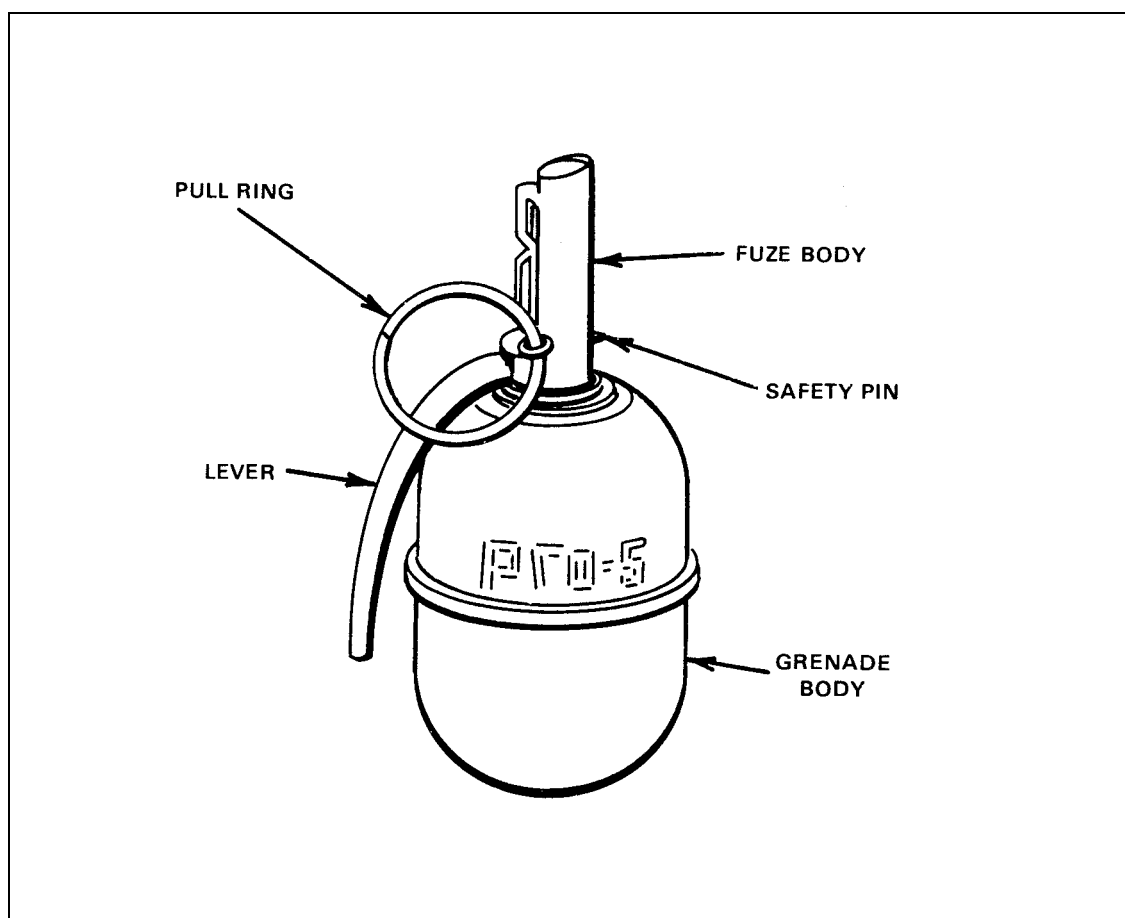


Figure D-5. RGD-5 hand grenade.

D-6. RG-42 FRAGMENTATION HAND GRENADE

- Type: Fragmentation. (Figure D-6)
- Weight: 435 grams.
- Body Material: Steel.
- Filler Material: 110 to 120 grams TNT.
- Fuze Type: Striker release.
- Fuze Delay: 3.2 to 4.2 seconds.
- Range Thrown: 30 meters.
- Effective Fragment Radius: 20 meters.

NOTE: The RG-42 has been copied and produced by numerous other countries throughout the world.

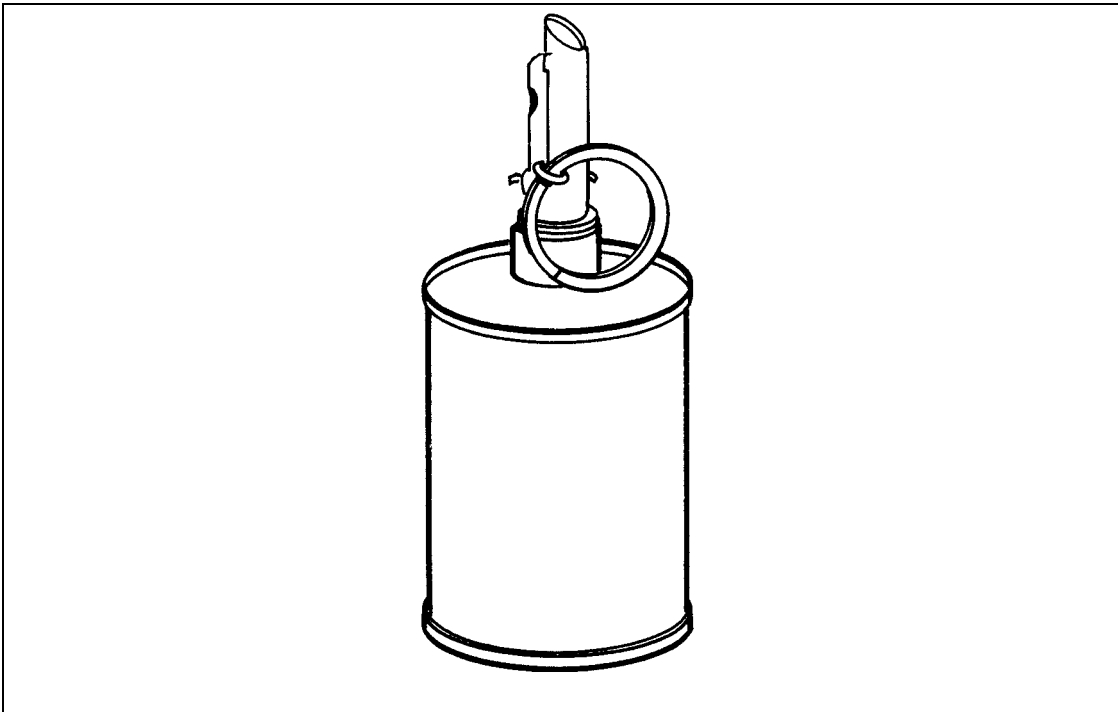


Figure D-6. RG-42 hand grenade.

D-7. RDG-1

- Type: Hand, smoke. (Figure D-7)
- Weight: 500 grams.
- Body Material: Cardboard, handle wood/cardboard.
- Burning Time: 60 to 90 seconds.
- Fuze: Friction fuze.
- Fuze Delay: Unknown.
- Filler: Smoke mixture.
- Range Thrown: 35 meters.

NOTE: This grenade is used to screen river crossings because it floats.

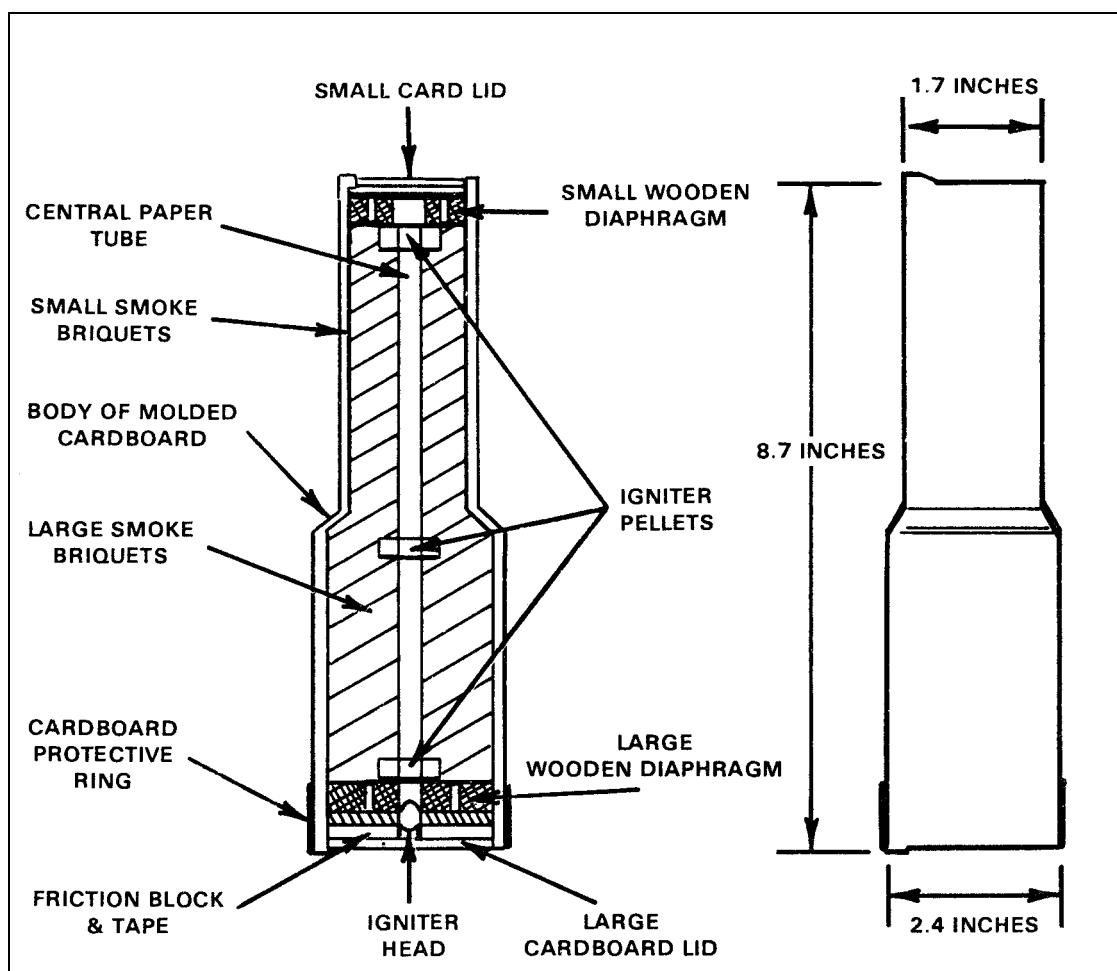


Figure D-7. RDG-1 smoke grenade.

D-8. RDG-2 AND RDG-3

- Type: Smoke. (Figure D-8)
- Weight: 500 grams.
- Body Material: Cardboard coated with wax, handle wood/cardboard.
- Burning Time: 50 to 90 seconds.
- Fuze: Friction fuze.
- Fuze Delay: Unknown.
- Filler: Smoke mixture.
- Range Thrown: 35 meters.

NOTE: This grenade does not float and is unsuitable for water use.

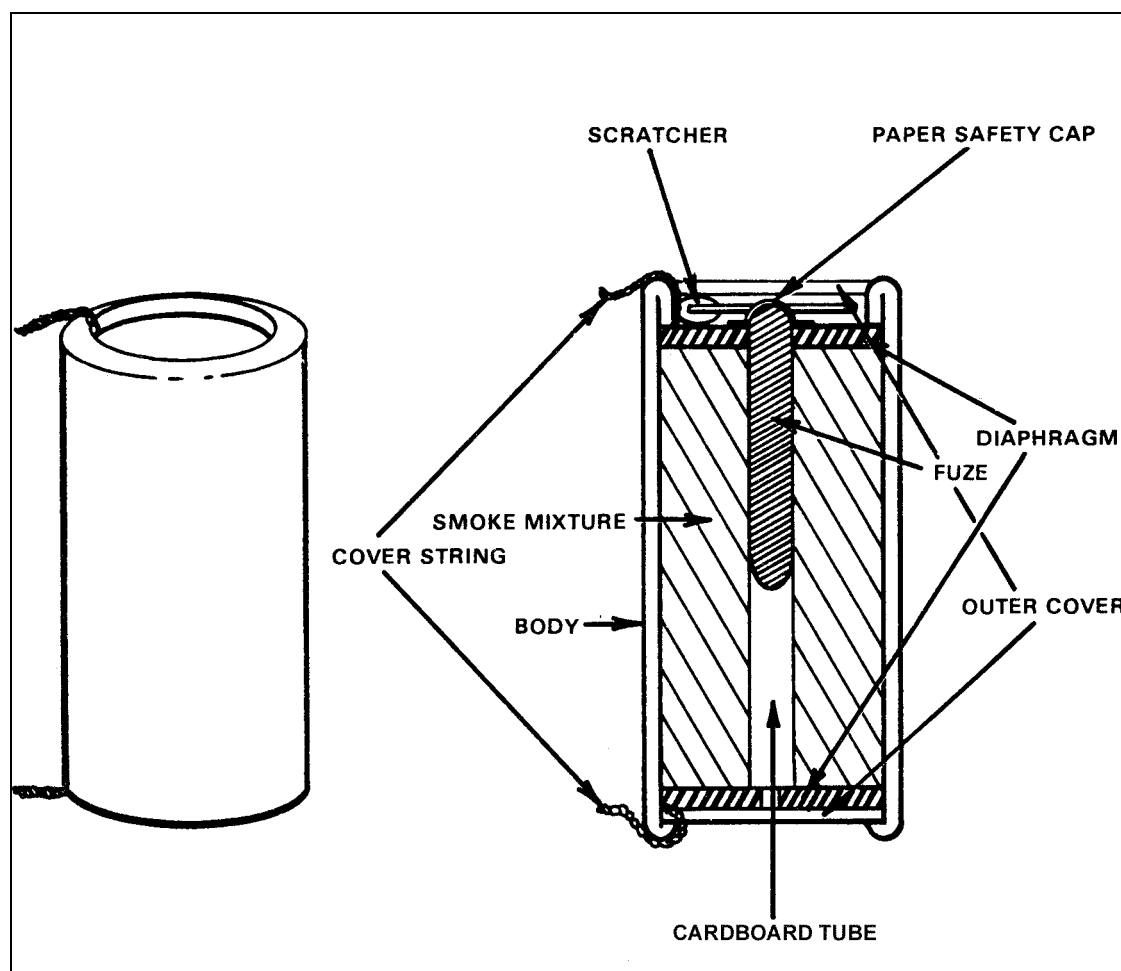


Figure D-8. RDG-2 and RDG-3 smoke grenade.

Section II. NORTH KOREA

D-9. ROUND FRAGMENTATION GRENADE

- Type: Fragmentation. (Figure D-9)
- Weight: 600 grams.
- Body Material: Cast aluminum body with 140 to 150 cast iron balls embedded in it.
- Fuze: Striker release.
- Fuze Delay: 3.2 to 4.2 seconds.
- Filler: TNT, 60 grams.
- Effective Casualty Radius: 20 meters.

NOTE: A variation of this grenade has a plastic body.

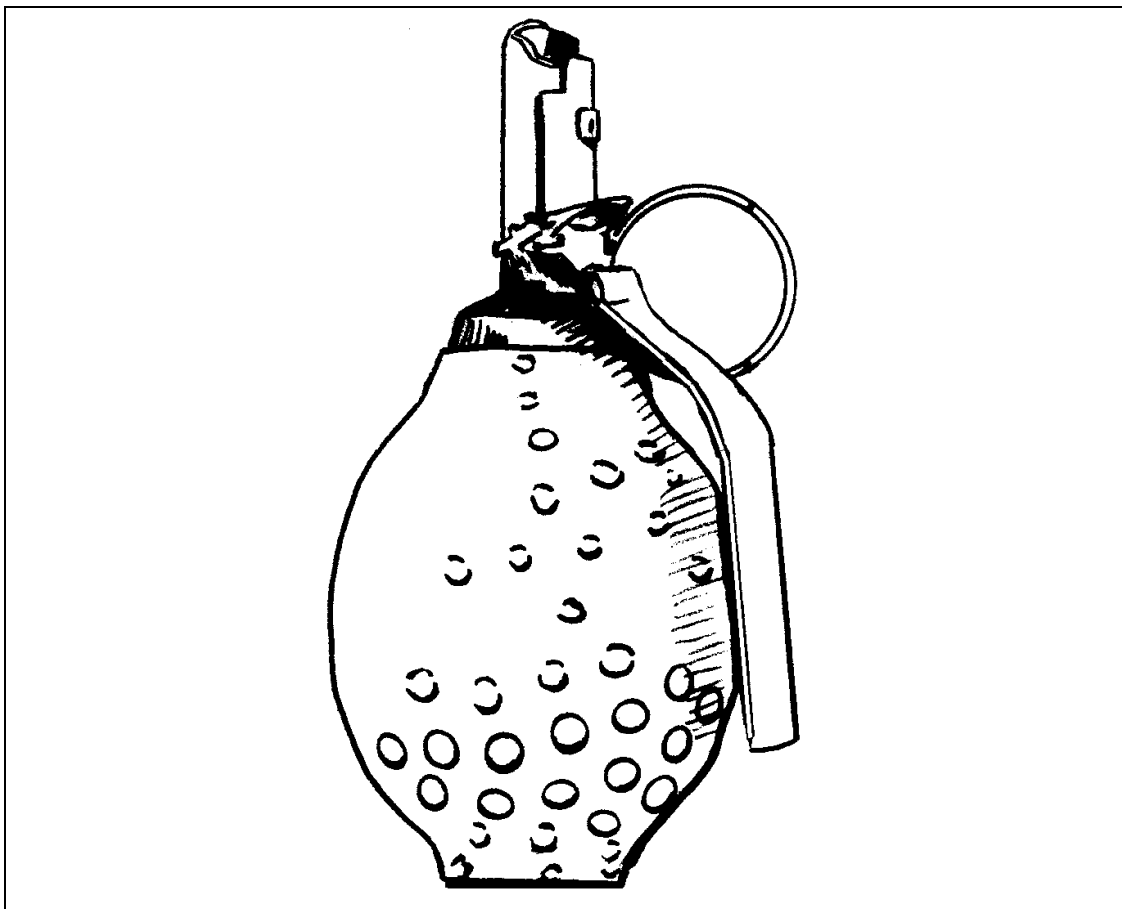


Figure D-9. North Korean fragmentation grenade (round).

D-10. RECTANGULAR FRAGMENTATION GRENADE

- Type: Fragmentation. (Figure D-10)
- Weight: 370 grams.
- Body Material: Sheet steel with about 1,300 steel balls in a cavity between the outer wall and the explosive filler.
- Fuze: Striker release.
- Fuze Delay: 3.2 to 4.2 seconds.
- Filler: Composition B, 55 grams.
- Effective Casualty Radius: 20 meters.

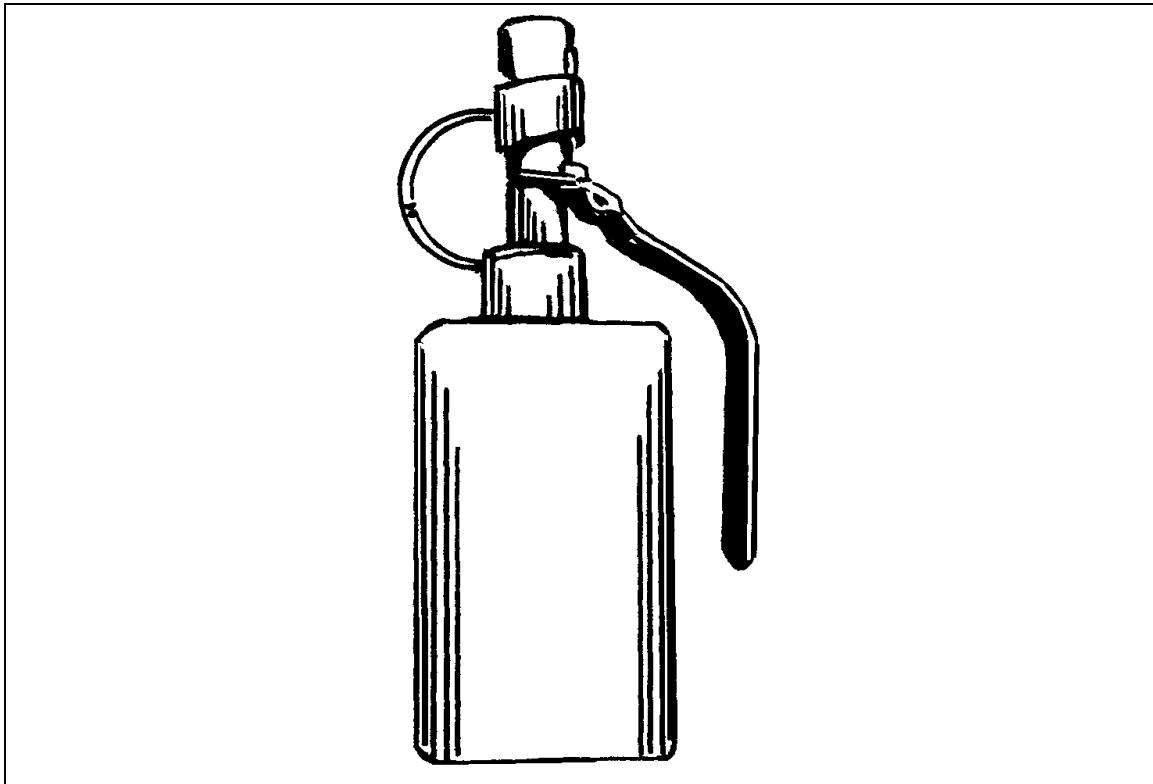


Figure D-10. North Korean fragmentation grenade (rectangular).

D-11. LACHRYMATORY GRENADE

- Type: Lachrymatory. (Figure D-11)
- Weight: 350 grams.
- Body Material: Sheet steel with a wooden handle.
- Fuze: Pull friction.
- Fuze Delay: 3 to 4 seconds.
- Filler: CS mixture/TNT.
- Range Thrown: 20 meters.
- Effective Radius: 10 meters.

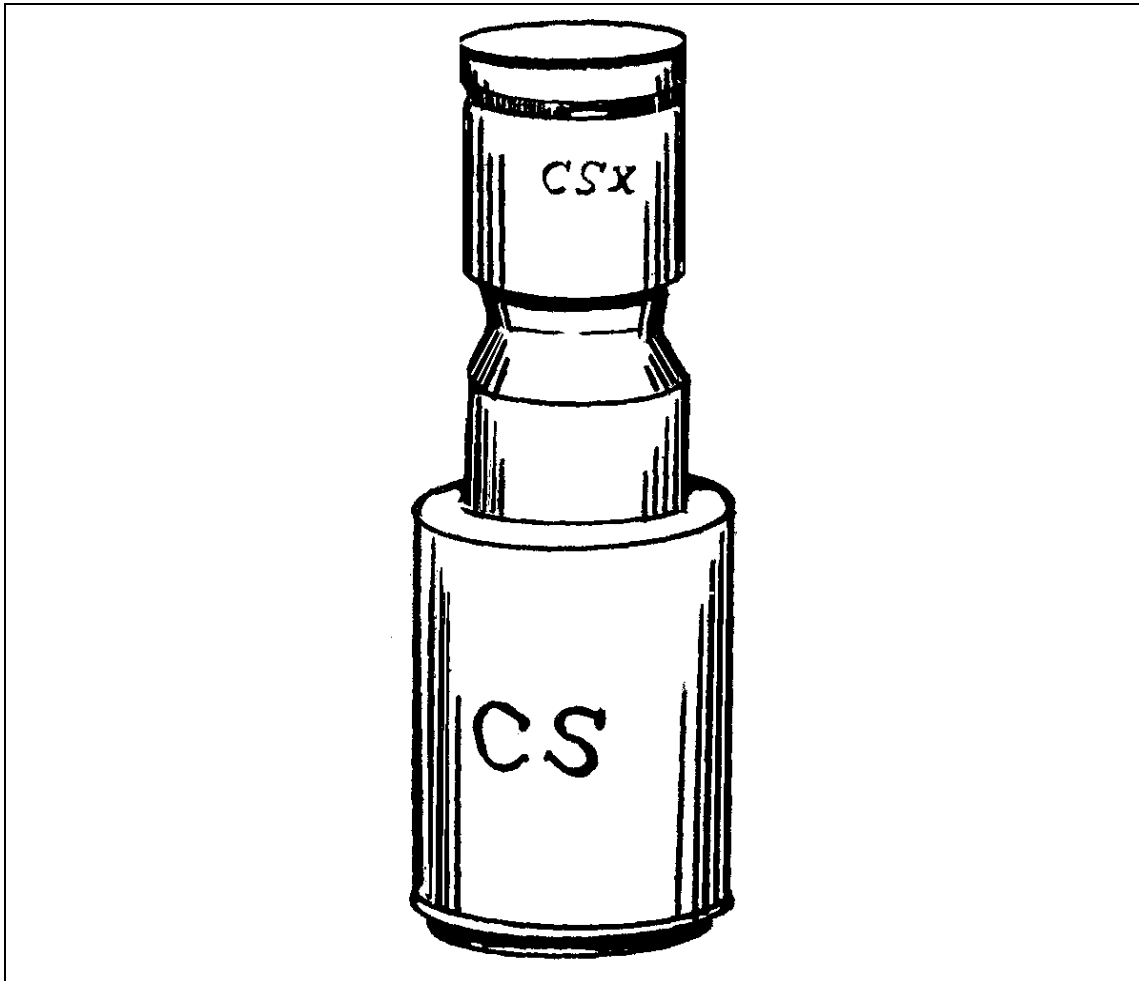


Figure D-11. North Korean lachrymatory grenade.

Section III. CHINA

D-12. TYPE 1 FRAGMENTATION GRENADE

- Type: Fragmentation. (Figure D-12)
- Weight: 600 grams.
- Body Material: Cast iron.
- Fuze: Striker release.
- Fuze Delay: 3 to 4 seconds.
- Filler: TNT, 50 grams.
- Lethal Range: 20 meters.

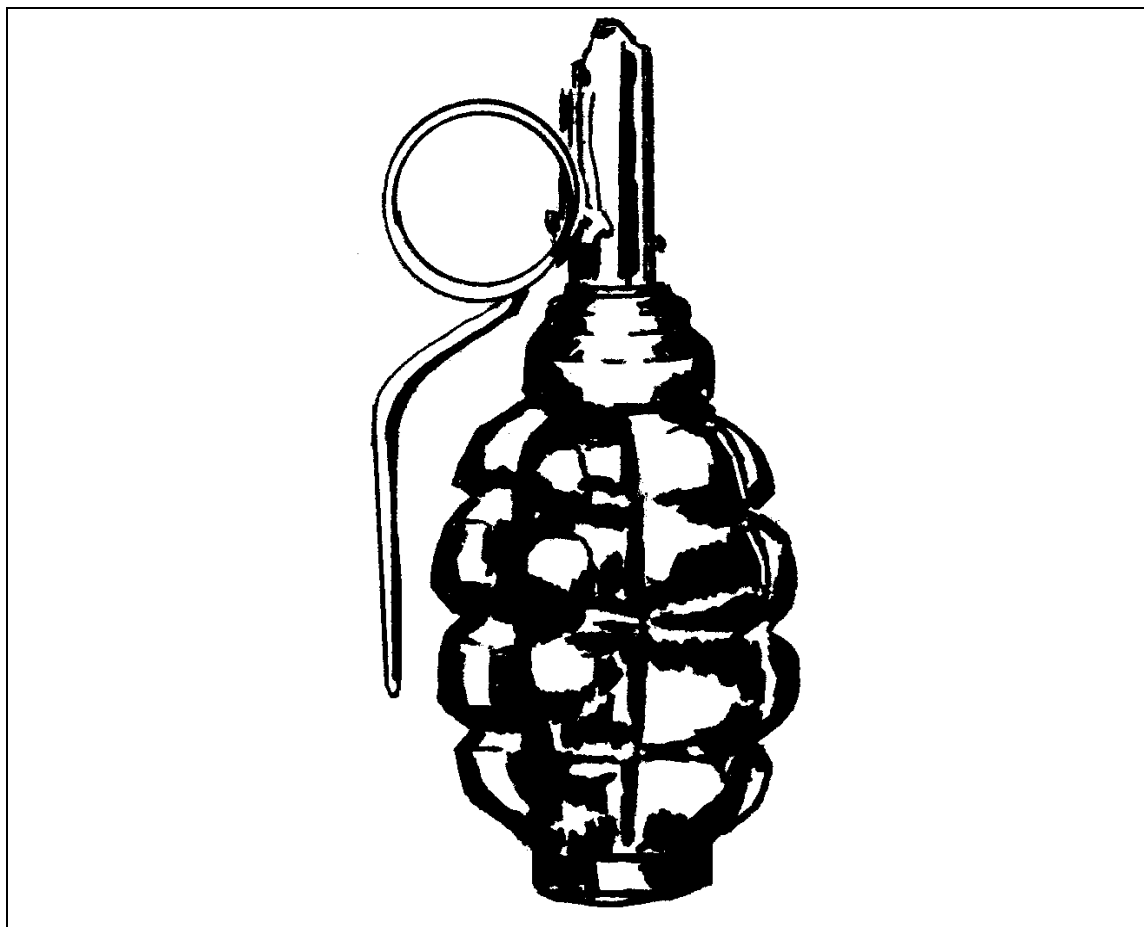


Figure D-12. Type 1 fragmentation grenade.

D-13. TYPE 73 FRAGMENTATION GRENADE

- Type: Fragmentation. (Figure D-13)
- Weight: 190 grams.
- Body Material: Two-piece sheet metal body enclosing a layer of 580 steel balls.
- Fuze: Percussion.
- Fuze Delay: 0.5 to 1 second.
- Filler: Unknown.
- Effective Casualty Radius: 7 meters.

NOTE: A variation of this grenade may be in use as a rifle grenade with a tail fin assembly.

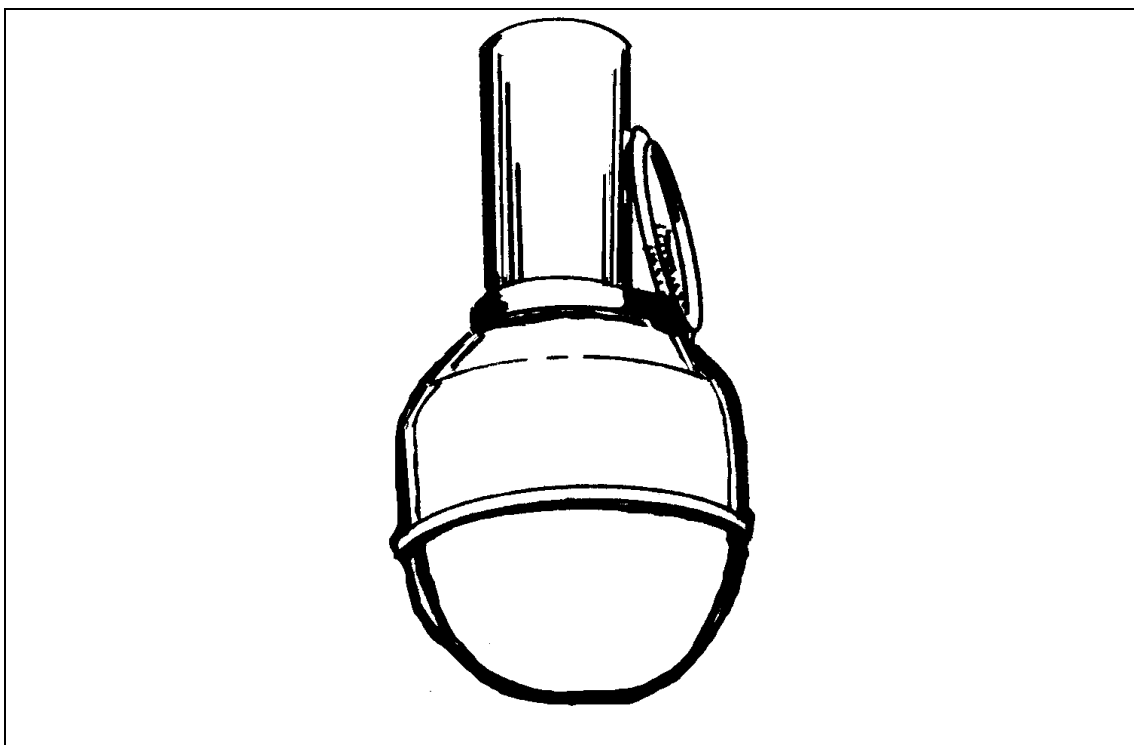


Figure D-13. Type 73 fragmentation grenade.

D-14. TYPE 77-1 FRAGMENTATION STICK

- Type: Fragmentation. (Figure D-14)
- Weight: 380 grams.
- Body Material: Cast iron with a plastic handle and sheet metal or plastic fuze cover cap.
- Fuze: Pull friction.
- Fuze Delay: 2.8 to 4 seconds.
- Filler: TNT, 70 grams.
- Lethal Radius: 7 meters.

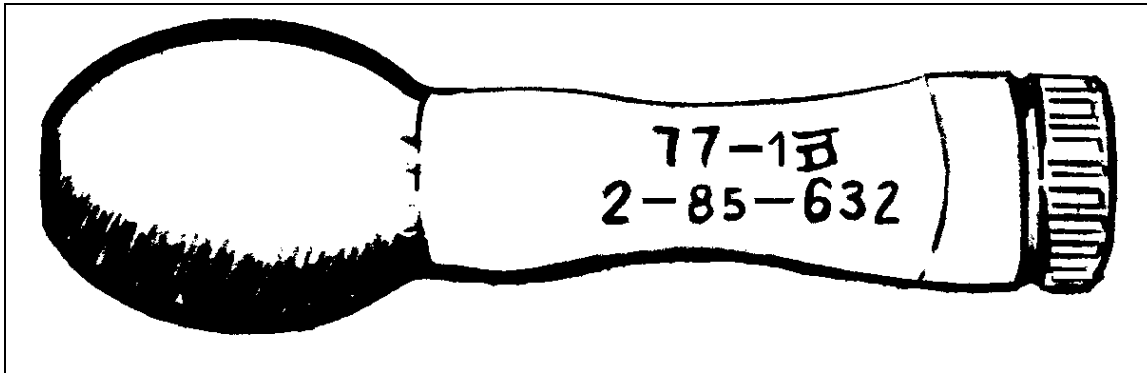


Figure D-14. Type 77-1 fragmentation stick.

D-15. SC-2 LACHRYMATORY GRENADE

- Type: Lachrymatory (explosively dispersed). (Figure D-15)
- Weight: 110 grams.
- Body Material: Plastic.
- Fuze: Striker release or friction.
- Fuze Delay: 2.8 to 3.6 seconds.
- Filler: Tear agent, 25 grams.
- Coverage: 300 cubic meters.

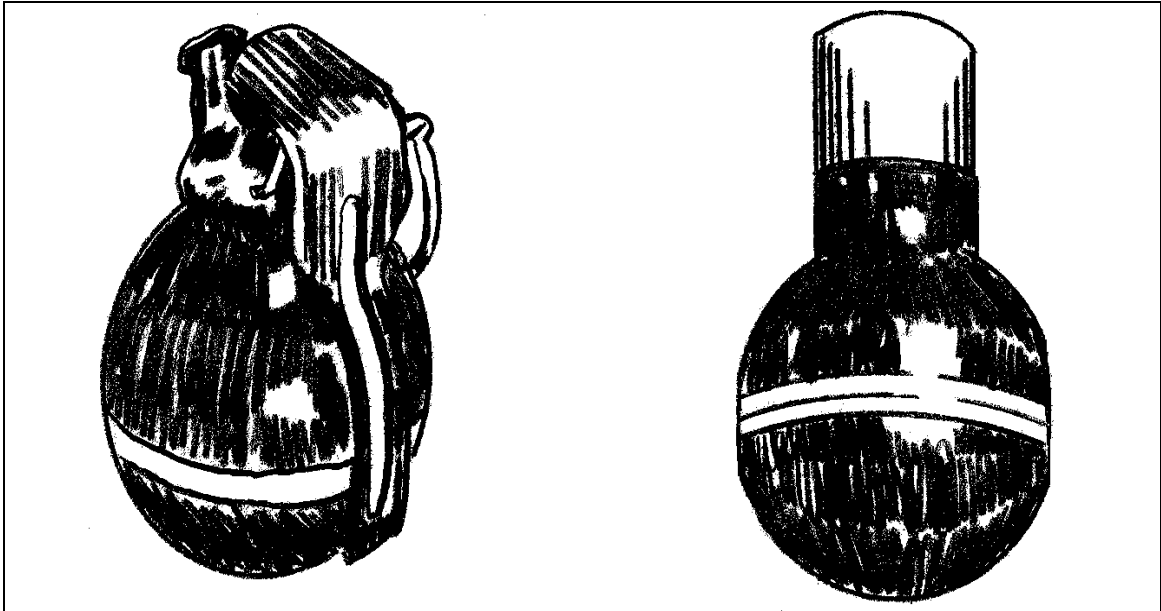


Figure D-15. SC-2 lachrymatory grenade.

D-16. SC-2 LACHRYMATORY/SMOKE GRENADE

- Type: Lachrymatory/smoke. (Figure D-16)
- Weight: 110 grams.
- Body Material: Plastic.
- Fuze: Striker release or friction.
- Fuze Delay: 1.8 to 2.8 seconds.
- Filler: Tear agent/smoke mixture, 70 grams.
- Coverage: 300 cubic meters.

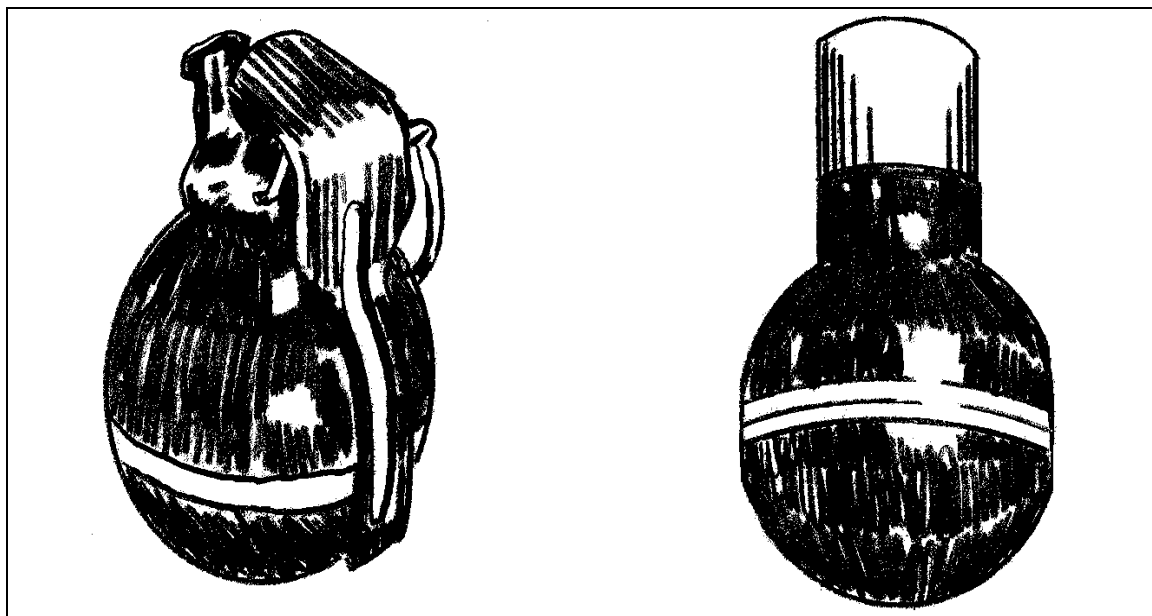


Figure D-16. SC-2 lachrymatory/smoke grenade.

D-17. JYD-1

- Type: Rubber ball. (Figure D-17)
- Weight: 150 grams.
- Body Material: Plastic.
- Fuze: Striker release or friction.
- Fuze Delay: 2.8 to 3.4 seconds.
- Filler: 840 rubber balls; bursting charge, 4 grams.
- Effective radius: 0.3 to 3 meters.



Figure D-17. JYD-1 rubber ball grenade.

D-18. JYB-1

- Type: Stun. (Figure D-18)
- Weight: 150 grams.
- Body Material: Plastic.
- Fuze: Striker release or friction.
- Fuze Delay: 3 to 4 seconds.
- Filler: Pyrotechnic mixture, 45 grams.
- Coverage: Sound level over 150 decibels within 10 meters.



Figure D-18. JYB-1 stun grenade.

D-19. JYS-1

- Type: Flash/bang. (Figure D-19)
- Weight: 45 grams.
- Body Material: Plastic.
- Fuze: Striker release or friction.
- Fuze Delay: Unknown.
- Filler: Pyrotechnic mixture, 25 grams.
- Effective Range: 10 meters.
- Flash Intensity: 40,000,000 candella.



Figure D-19. JYS-1 flash/bang grenade.